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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,687	07/24/2001	Moshe Shoham	10892-003-999	7153

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EXAMINER

NGUYEN, VI X

ART UNIT PAPER NUMBER

3731

DATE MAILED: 01/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,687

Applicant(s)

SHOHAM, MOSHE

Examiner

Victor X Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-13, 33-35 and 45-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13, 33-35 and 45-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, 8, 10-12, 33-35 and 46-49 are rejected under 35 U.S.C. 102 (e) as being anticipated by Mittelstadt et al (U.S. 6,322,567).

Regarding claims 1 and 46, figures 1-2 and 4, Mittelstadt et al disclose a device having all the limitations as recited in the above listed claims, including: a surgical robot (11); an attachment member (48,70 and col. 8, lines 15-25) configures and mounts the surgical robot on a bone (50); a controller programmed (22) prior to the surgical procedure directs the robot to position at the surgical site; and wherein the robot includes at least 3 actuators (42) which mounts on a base member (fig. 2). The actuator is configured for at least translational or rotational movement (col. 8, lines1-15).

Regarding claims 6, 8 and 10, wherein the robot (11) includes a parallel robot (see col. 7, lines 39-65); wherein the attachment member (48,70) includes a robot; and wherein the bone attachment portion includes a wire (47) which configures to be received in bone (50).

Regarding claims 11-12 and 47-48, wherein the controller includes a cpu and user interface (13) which communicates with the robot. The cpu contains a program for

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guiding the robot based on data generated from the surgical site images; and wherein the surgical site images are created prior to each surgical procedure a new location for the support member (col.2, lines 39-67 and col. 3, lines 51-67).

Regarding claims 33-35 and 49, the controller is further programmed to locate the surgical robot with respect to a patient anatomy which based on at least three dimensional patient image; wherein the controller is further programmed with instructions for execution of a surgical plan; and wherein the controller is further programmed with instructions for registering the surgical robot positionally with at least one pre-operative image of a patient (col. 3, lines 51-67 and col. 4, lines 4-31).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,13 and 45 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Mittelstadt et al (6,322,567). Mittelstadt et al disclose a surgical system including all limitations substantially as claimed ; however, Mittelstadt et al do not disclose at least 4 actuators that extend outward from the base member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct 4 actuators mounted on a base, since it had been held that rearranging parts of an invention involve only routine skill in the art. In re Japikse, 86 USPQ 70.

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Claims 3-5,9 and 50 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Mittelstadt et al in view of Jensen et al (5,814,038).

Mittelstadt et al teach all limitations substantially as claimed except the bone attachment portion includes a clamp. Jensen et al teach the bone attachment portion includes a clamp (fig. 1, item 14, col. 7, lines 51-60) in order to grasp and manipulate instrument efficiently under the surgeon's control. It would have been obvious to one having ordinary skill in the art at the time the invention to modify Mittelstadt et al by adding the bone attachment portion includes a clamp in order to grasp and manipulate instrument efficiently under the surgeon's control.

Response to Amendment

Applicant's arguments filed 11/07/2003 have been fully considered but they are not persuasive. Applicant's arguments with respect to claims 1, 13 and 46 have been considered but are moot in view of the new ground(s) of rejection. Newly submitted claims 51-54 are directed to an invention that is dependent from non-elected invention IV (which is withdrawn in Paper # 10). Therefore, claims 51-54 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor X Nguyen whose telephone number is (703) 305-4898. The examiner can normally be reached on M-F (8-4.30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano can be reached on (703) 308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-3982.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Victor X Nguyen
Examiner
Art Unit 3731

Vn *✓*
January 223, 2004


KEVIN T. TRUONG
PRIMARY EXAMINER

1/26/04